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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,218	02/05/2002	Wolfgang Schmutz	390-010641-US(PCT)	5544
2512	7590	10/20/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			BRAHAN, THOMAS J	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/009,218	Applicant(s) SCHMUTZ ET AL.	
	Examiner Thomas J. Brahan	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3654

1. Claim 6 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic claim.
2. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the storage spaces arranged only in rows and only in columns, as recited in the alternative in the phrase "in row and/or column arrangement" in claims 1 and 2 must be shown, or the feature must be canceled from the claims. No new matter may be entered.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
4. The following is a quotation of the second paragraph of 35 U.S.C. § 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.
5. Claims 11, 12, 17 and 18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to how the applicant is considering the second manipulating device as being between the storage spaces and the locking units, as recited in claim 11. It is also unclear as to how claims 17 and 18 can depend from claim 11 and recite different locations for the second manipulating device.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3654

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

8. Claims 1, 4, 9, 13, 14 and 16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Iwai et al. Figure 11 of Iwai et al shows a device for manipulating substrates inside and outside an ultraclean workroom (between front auto door 120 and partition wall 154) with a storage room (112) and a sluice device (at the upper wall of cassette extracting mechanism 163), the sluice device being provided between the storage room (112) and the ultraclean workroom (the space defined by front auto door 120 and partition wall 154), and providing means by which a substrate cassette (C) accommodated under ultraclean room conditions in a box (114) can be accessed in the box under ultraclean room conditions, and with a first manipulating device (wafer transfer 152) by means of which substrates (W) can be placed in the cassette (C) and can be removed from the cassette, is hereby characterized in that the storage room (112) is adapted for holding a multiple number of the boxes accommodated in row and/or column arrangement (three columns), and is extending over substantially the entire ultraclean workroom (the area between the front auto door 120 and the partition wall 154).

The sluice device of Iwai et al is formed in a ceiling of the ultraclean room and in a floor of the storage room, as recited in claim 4. The ultraclean room has several working chambers (101, 108) each served by the first manipulating device (152; note the term served is broad), as recited in claim 9. The storage room has a closable input/output opening (113), as recited in claims 13 and 14. The manipulating device (152) has a fork unit, see figure 12, as recited in claim 16.

9. Claims 2, 3, 5, 8, 11, 12, 17 and 18, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwai et al in view of Ohsawa. Figure 11 of Iwai et al shows the basic claimed device, as detailed above, but varies from claim 2 by having only one load locking unit (the transfer unit at 159/163 which lowers the cassettes into ultraclean workroom) from the storage area (12). Ohsawa shows a similar treating apparatus with two locking units (4A and 4B) for feeding two processing chambers (3A and 3B). It would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 3654

by applicant to modify the wafer treating apparatus of Figure 11 of Iwai et al by having it arranged with two locking units and with two processing chambers, to increase production, as taught by Ohsawa. The locking units of Iwai et al have a sluice door (133) formed as a component of the cassette, see figure 15, as recited in claims 3 and 5. Iwai has a lifting device (163) at the locking unit, as recited in claim 8, as to have a lifting unit at each locking unit, when modified as per the teachings of Ohsawa. Iwai et al has a second manipulating device (118) operating between the storage spaces and the locking units, as claims 11, 17 and 18 are best understood. The second manipulating device moves on a linear guide (149), as recited in claim 12.

10. Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwai et al in view of Ohsawa et al (U.S. Patent No. 5,645,391). Iwai et al shows the basic claimed device, as detailed above, but varies from claim 10 by not having linear guides for the first manipulating device (wafer transfer 152). Ohsawa et al shows a similar heat treatment system and shows a wafer transfer device with linear guides (57; see figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the wafer transfer (152) of Iwai et al by providing it with linear guides, as to have accurate guided movements, as taught by Ohsawa et al.


11. Applicant argued in the amendment filed December 15, 2004, that due to the Festo decision the applicant will not make any amendments unless "clearly necessary" as to remove the awkward claim language noted by the examiner. As the claim language is understandable, albeit imprecise, most of the rejections under 35 U.S.C. § 112 have been withdrawn. Applicant also argued that ultraclean room of Iwai et al includes the process tube 101 and other features, such that the storage area 112 is not extending substantially over the entire ultraclean room. However the rejection defines the area between the front unit door (120) and the partition wall (154) as being considered as a room. As this is a chamber sealed by a door, and part of ultraclean workroom, this area can be considered as a workroom, and as an ultraclean workroom. The storage area (112) extends over this workroom. Applicant's amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The new fax number for all patent applications

Art Unit: 3654

is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 10/16/05
Thomas J. Brahan
Primary Examiner
Art Unit 3654